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EXAMINER

RASHID, DAVID

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/524,430	<b>Applicant(s)</b> PRYMUS ET AL.	
	<b>Examiner</b> DAVID P. RASHID	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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***Prior Art***

U.S. Patent No. 5,682,439 (issued Oct. 28, 1997, hereinafter "Beernink '439").....	6
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U.S. Pub. No. 2001/0026639 (published Oct. 4, 2001, hereinafter "Sparr et al.") .....	14

***Amendments***

[1] This office action is responsive to Reply to Office Action (hereinafter "Amendment") received Apr. 22, 2009. Claims 1-34 remain pending.

***Claim Rejections - 35 U.S.C. § 101***

[2] In response to Amendment at 11-12, the previous § 101 rejections are withdrawn.

***Response to Arguments******Remarks Persuasive regarding Rejections Under 35 U.S.C. § 102***

[3] Amendment at 12-20 regarding 35 U.S.C. § 102 rejections with respect to claim 1 of Beernink '438 have been respectfully and fully considered, and found persuasive.

***Remarks Unpersuasive regarding Rejections Under 35 U.S.C. § 102***

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[4] Amendment at 20-22 regarding 35 U.S.C. § 102 rejections with respect to claims 1-6, 8-16, 18-24, and 26-34 have been respectfully and fully considered, but are not found persuasive.

Independent claim 1 recites that "at least two of the plurality of templates comprise different ones of the plurality of writing symbol patterns which represent different ways of writing a single symbol." None of the letters forming the character strings in Beernink '439 represent different ways of writing a single symbol. For example, the first, third, and fourth character strings of Beernink '439 each include a letter "C", but that letter "C" is identical in all three instances. Therefore, the letters "C" in the first, third, and fourth character strings of Beernink '439 do not represent different ways of writing a single symbol, but rather, represent identical ways of writing a single symbol.

Amendment at 21.

Applicant argues that the first, third, and fourth character strings of Beernink '439 each include letter "C", but that letter "C" is identical in all three instances in the first, third, and fourth character strings. See Amendment at 21.

However, the full disclosure of fig. 5, item 170 of Beernink '439 discloses both "C" and "c". Applicant choosing the specific elements in listing item 170 for which is only "C" is unpersuasive because the same listing includes both "C" and "c", which has been interpreted as different writing symbol patterns (as further argued below why this is a reasonable interpretation in light of the specification by the Examiner).

In contrast, the attached Diagram shows different ways of writing a symbol. For example, the Diagram shows different ways E11 and E12 of writing a single symbol, that symbol being the number "2". The Diagram also shows different ways E21, E22, and E23 of writing a single symbol, that symbol being a capital letter "Z". The capital letter "C" and the lower-case letter "c" in the character strings of Beernink '439, however, represent ways of writing different symbols. Accordingly, Beernink '439 fails to teach or suggest "at least two of the plurality of templates comprise different ones of the plurality of writing symbol patterns which represent different ways of writing a single symbol," as recited in claim 1. For at least this reason, Beernink '439 cannot anticipate claim 1.

Amendment at 21.

However, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the

(i) handwritten patterns are composed of individual letters/numbers – e.g., see Amendment at 14, item C of Diagram A,

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(ii) templates are also composed of handwritten and stored individual letters/numbers – e.g., see Amendment at 14, item C of Diagram A, and

specifically (iii) single symbols are composed of different “handwritten” ways of writing a specific letter/number (e.g., "A", "A", and "A"), that does not include capital and lower-case letters (e.g., “C” and “c”) of that specific letter/number – e.g., see Amendment at 14 (items E1, E2) and 21

are not recited in the rejected claims.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). (Claims to a superconducting magnet which generates a “uniform magnetic field” were not limited to the degree of magnetic field uniformity required for Nuclear Magnetic Resonance (NMR) imaging. Although the specification disclosed that the claimed magnet may be used in an NMR apparatus, the claims were not so limited.); Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1571-72, 7 USPQ2d 1057, 1064-1065 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988) (Various limitations on which appellant relied were not stated in the claims; the specification did not provide evidence indicating these limitations must be read into the claims to give meaning to the disputed terms.); Ex parte McCullough, 7 USPQ2d 1889, 1891 (Bd. Pat. App. & Inter. 1987) (Claimed electrode was rejected as obvious despite assertions that electrode functions differently than would be expected when used in nonaqueous battery since “although the demonstrated results may be germane to the patentability of a battery containing appellant’s electrode, they are not germane to the patentability of the invention claimed on appeal.”). See MPEP § 2111 - § 2116.01, for additional case law relevant to claim interpretation.

M.P.E.P. § 2145(VI).

With respect to (iii) above, the claim does not positively recite that single symbols are composed of different “handwritten” ways of writing a specific letter/number (e.g., "A", "A", and "A"), and not the difference between “handwritten” ways of writing capital and lower-case letters (e.g., "A", and "a"). The Examiner has reasonably interpreted in light of the specification a single symbol to be a specific English alphabet character, including different variations of it, whether capital/lower-case or one handwritten style or another. It is suggested for Applicant to further limit claim 1 by restricting single symbols to be composed of different “handwritten” ways of writing a specific letter/number (e.g., "A", "A", and "A"), and excluding capital and lower-case letters (e.g., “C” and “c”) of that specific letter/number.

Contrary to the allegations of the Applicant (Amendment at 22), Beernink ‘439 teaches the elements recited in independent claims 15 and 33-34 for analogous reasoning as given above by the Examiner.

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Remarks Persuasive regarding Rejections Under 35 U.S.C. § 103

[5] Amendment at 23-24 regarding 35 U.S.C. § 103 rejections with respect to claim 15 of Beernink '438 in view of Beernink '439 have been respectfully and fully considered, and found persuasive.

Remarks Unpersuasive regarding Rejections Under 35 U.S.C. § 103

[6] Amendment at 24-26 regarding 35 U.S.C. § 103 rejections with respect to claims 7 and 25 of Beernink '438 in view of Sparr have been respectfully and fully considered, but are not found persuasive.

As argued above, Beernink '438 does not contain any deficiencies from which Sparr is expected to cure. The differences and motivation are property given in the § 103 rejection below.

[7] Amendment at 26-27 regarding 35 U.S.C. § 103 rejections with respect to claim 17 of Beernink '438 in view of Kadashevich have been respectfully and fully considered, but are not found persuasive.

As argued above, Beernink '438 does not contain any deficiencies from which Kadashevich is expected to cure. The differences and motivation are property given in the § 103 rejection below.

***Claim Rejections - 35 U.S.C. § 102***

[8] The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall

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have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Beernink '439

[9] **Claims 1-6, 8, 11, and 33** are rejected under 35 U.S.C. § 102(b) as being anticipated by *Beernink '439*.

Regarding **claim 1**, *Beernink '439* discloses a method performed by a recognition device (fig. 1) for presenting a recognized handwritten symbol (e.g., handwritten symbols being the English alphabet symbols using item 110 at fig. 2), the recognition device having a processor (fig. 12, item 12) and detection means (fig. 1, item 40 storing programs) for detecting entry of a handwritten symbol, the method comprising the steps of:

detecting, by the detection means, a handwritten pattern (e.g., fig. 6, item 172; "Correct") that is entered by a user (user uses fig. 2, item 106);

recognizing (fig. 6, list items 170; item 172 as a result of recognizing the actual handwritten pattern on fig. 2, item 106), by the processor, the detected handwritten pattern (e.g., fig. 6, item 172; "Correct"),

wherein said step of recognizing comprises comparing the handwritten pattern to a plurality of templates (fig. 6, item 170; e.g., template1 being "Correct", template2 being "correct", template3 being "Currect", template4 being "Cwrect", template5 being "current"),

wherein each of the plurality of templates represents at least one of a plurality of writing symbol patterns (e.g., fig. 6, item 170 is composed of "C", "c", "o", "r", "u", "w", "t", etc. in each of the templates; e.g., template4 comprised of "C", "w", "r", "e", "c", "t") of ways of writing symbols (symbols being the English alphabet symbols; e.g., symbol "c" being writing symbol patterns "C" and "c"), and

returning a best template (top template "Correct" at item 170, fig. 6) selected from the plurality of templates (fig. 6, item 170; e.g., template1 being "Correct", template2 being "correct", template3 being "Currect", template4 being "Cwrect", template5 being "current") that represents one of the plurality of writing symbol patterns (e.g., writing symbol pattern "C" in best template "Correct" selected, not writing symbol pattern "c", thus "C" being the best writing symbol pattern when template1 is selected as the best template) as a best writing symbol pattern

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which, according to a predefined rule, is most similar to the handwritten pattern (inherent rules must exist such that writing symbol pattern C" in best template "Correct" on list 170 was selected),

wherein at least two of the plurality of templates (e.g., item 170 contains template1 "Correct" and template2 "correct") comprise different ones of the plurality of writing symbol patterns which represent different ways of writing a single symbol (symbols being the English alphabet symbols; e.g., symbol "c" being writing symbol patterns "C" and "c"); and

presenting (fig. 6, item 151; fig. 2, item 44) the best writing symbol pattern (e.g., writing symbol pattern "C" in best template "Correct" selected, not writing symbol pattern "c", thus "C" being the best writing symbol pattern) of the best template (top template "Correct" at item 170, fig. 6).

Regarding **claim 2**, *Beernink '439* discloses the method according to claim 1, wherein each of the plurality of writing symbol patterns (e.g., fig. 6, item 170 is composed of "C", "c", "o", "r", "u", "w", "t", etc. in each of the templates) of a template (fig. 6, item 170; e.g., template1 being "Correct", template2 being "correct", template3 being "Currect", template4 being "Cwrect", template5 being "current") is represented by geometrical information (it is implicit if not already inherent that each of the plurality of writing symbol patterns of a template is "represented by geometrical information" as each of the plurality of writing symbol patterns of a template consists of geometrical information such as height, width, etc – i.e., item 170 requires geometric information) relating to an appearance of each of said plurality of writing symbol patterns.

Regarding **claim 3**, *Beernink '439* discloses the method according to claim 2, wherein the geometrical information (it is implicit if not already inherent that each of the plurality of writing symbol patterns of a template is "represented by geometrical information" as each of the plurality of writing symbol patterns of a template consists of geometrical information such as height, width, etc – e.g., item 170 requires geometric information) comprises information of positions of a number of dots (it is again inherent that the tablet-screen 44 of fig. 2 will pick up individual pixels from which the user writes, each pixel being a dot that represents additional positional information on the tablet-screen) representing each of the plurality writing symbol patterns (e.g., fig. 6, item 170 is composed of "C", "c", "o", "r", "u", "w", "t", etc. in each of the



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templates), said each of the plurality of writing symbol patterns being presented by lines (a stroke of a character written on tablet-screen 44 of fig. 2 will contain a string of pixels (dots) that are presented by lines drawn between the pixels, fig. 6, item 172 for instance) drawn between the dots.

Regarding **claim 4**, *Beernink '439* discloses wherein the step of presenting comprises presenting the whole best writing symbol pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) represented by the best template (top template “Correct” at item 170, fig. 6) at once.

Regarding **claim 5**, *Beernink '439* discloses the method according to claim 3, wherein the step of presenting comprises presenting the lines one at a time (each time the user writes a stroke to be recognized, that stroke consists of pixels (dots) and lines between the pixels, and each time the user writes a new stroke another line is constructed and thus lines are being presented one at a time).

Regarding **claim 6**, *Beernink '439* discloses the method according to claim 1, further comprising, before the step of presenting, manipulating (manipulation occurs when transforming “C” at item 172 to the “C” at fig. 170) the best writing symbol pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) of the best template (top template “Correct” at item 170, fig. 6) according to characteristics of the handwritten pattern (e.g., fig. 6, item 172; “Correct”).

Regarding **claim 8**, *Beernink '439* discloses the method according to claim 1, wherein the handwritten pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) is entered on an input area (e.g., fig. 3, item 151) on the screen (fig. 2, item 44; fig. 6, item 151) and the best writing symbol pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) of the best template (top template “Correct” at item 170, fig. 6) is presented in a presentation area (fig. 6, item 168) on the screen (fig. 2, item 44; fig. 6, item 151), whereby said presentation area (fig. 6, item 168) overlaps the input area (when the recognition of the handwriting updates, it is performed right over the same spot, thus overlapping).

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Regarding **claim 9**, *Beernink '439* discloses the method according to claim 1, wherein the step of recognizing comprises returning at least one alternative template (e.g., template5 being “correct” alternative from template1 being “Correct” as listed on item 170) selected from the plurality of templates (fig. 6, item 170; e.g., template1 being “Correct”, template2 being “correct”, template3 being “Current”, template4 being “Cwrect”, template5 being “correct”).

Regarding **claim 10**, *Beernink '439* discloses the method according to claim 9, wherein the step of presenting the at least one of the plurality of writing symbol patterns (e.g., fig. 6, item 170 is composed of "C", "c", "o", "r", "u", "w", "t", etc. in each of the templates) of the at least one alternative template (e.g., template5 being “correct” alternative from template1 being “Correct” as listed on item 170) at a request of a user (“word 164 being selected to invoke a pop-up corrector 168” at 10:17-30).

Regarding **claim 11**, *Beernink '439* discloses the method according to claim 1, wherein each of the plurality of templates is associated with a category (a category is a character from the English alphabet, each category comprised of different user styles writing it, and whether it is uppercase, lowercase, etc) defining what kind of symbol is represented by each of the plurality of templates.

Regarding **claim 12**, *Beernink '439* discloses the method of claim 11, wherein the step of presenting comprises masking the presentation of the presented interpretation according to which category the best interpretation is associated with (the masking is performed in step 170 of fig. 6 of the best interpretation being presented being the top of the list, among other possibilities of which include "C" and "c" for the character "C").

Regarding **claim 13**, *Beernink '439* discloses the method of claim 12, wherein the category (“C” is “associated” with the capitalized letter category in fig. 6, item 170) is indicated by a certain color of a background (the background color is white that indicates “C” is capitalized) to the at least one of the plurality of writing symbol patterns represented by the presented interpretation (presented interpretations being those listed in item 170, fig. 6 with the top on the list being the best interpretation).

Regarding **claim 14**, *Beernink '439* discloses the method of claim 13, wherein the category (“C” is “associated” with the capitalized letter category in fig. 6, item 170) is indicated by a certain color of the at least one of the plurality of writing symbol patterns (the color is black

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that indicates “C” is capitalized) represented by the presented interpretation (presented interpretations being those listed in item 170, fig. 6 with the top on the list being the best interpretation).

Regarding **claim 15**, *Beernink '439* discloses a method performed by a recognition device (fig. 1) for presenting a recognized handwritten symbols (e.g., handwritten symbols being the English alphabet symbols using item 110 at fig. 2), the recognition device having a processor (fig. 1, item 12) and detection means (fig. 1, item 40 storing programs) for detecting entry of a handwritten symbol, the method comprising the steps of:

Detecting, by the detection means, a handwritten pattern (e.g., fig. 6, item 172; “Correct”) that is entered by a user (user uses fig. 2, item 106);

recognizing (fig. 6, list items 170; item 172 as a result of recognizing the actual handwritten pattern on fig. 2, item 106), by the processor, the detected handwritten pattern (e.g., fig. 6, item 172; “Correct”),

wherein said step of recognizing comprises comparing the handwritten pattern to a plurality of templates (fig. 6, item 170; e.g., template1 being “Correct”, template2 being “correct”, template3 being “Currect”, template4 being “Cwrect”, template5 being “current”),

wherein each of the plurality of templates represents at least one of a plurality of writing symbol patterns (e.g., fig. 6, item 170 is composed of “C”, “c”, “o”, “r”, “u”, “w”, “t”, etc. in each of the templates; e.g., template4 comprised of “C”, “w”, “r”, “e”, “c”, “t”) of ways of writing symbols (symbols being the English alphabet symbols; e.g., symbol “c” being writing symbol patterns “C” and “c”), and

returning a best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) of the handwritten pattern (e.g., fig. 6, item 172; “Correct”), said best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) being based on one of the plurality of writing symbol patterns (e.g., fig. 6, item 170 is composed of “C”, “c”, “o”, “r”, “u”, “w”, “t”, etc. in each of the templates; e.g., template4 comprised of “C”, “w”, “r”, “e”, “c”, “t”) as a best writing symbol pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) of a best template (top template “Correct” at item 170, fig. 6) selected from the plurality of templates (fig. 6, item 170; e.g., template1 being “Correct”, template2 being

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“correct”, template3 being “Currect”, template4 being “Cwrect”, template5 being “currect”) that, according to a predefined rule, is most similar to the handwritten pattern (inherent rules must exist such that writing symbol pattern C" in best template "Correct" on list 170 was selected),

wherein at least two of the plurality of templates (e.g., item 170 contains templates “Correct” and “correct”) comprise different ones of the plurality of writing symbol patterns which represent different ways of writing a single symbol (symbols being the English alphabet symbols; e.g., symbol “c” being writing symbol patterns “C” and “c”),

and wherein the different ones of the plurality of writing symbol patterns (e.g., fig. 6, item 170 is composed of "C", "c", "o", "r", "u", "w", "t", etc. in each of the templates; e.g., template4 comprised of “C”, “w”, “r”, “e”, “c”, “t”) of said at least two of the plurality of templates (fig. 6, item 170; e.g., template1 being “Correct”, template2 being “correct”, template3 being “Currect”, template4 being “Cwrect”, template5 being “currect”) return different best interpretations (the second interpretation “correct”, 2<sup>nd</sup> from the top of the list contains alternate writing symbol patterns "C" and "c") when being most similar to the handwritten pattern (e.g., fig. 6, item 172; “Correct”); and

presenting (fig. 6, item 151; fig. 2, item 44) the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation).

Regarding **claim 16**, *Beernink '439* discloses further comprising, before the step of presenting, retrieving as the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation), from a database comprising allographs, a best allograph (the best allograph is the digital font letter of “C” that is it converted to (e.g., the text written in fig. 6, item 172 is converted to digital font)) that is associated with the best writing symbol pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) of the best template (top template “Correct” at item 170, fig. 6).

Regarding **claim 18**, *Beernink '439* discloses wherein the step of presenting comprises presenting the best allograph (the best allograph is the digital font letter of “C” that is it converted to (e.g., the text written in fig. 6, item 172 is converted to digital font)) represented by a number of arcs (it is inherent that each allograph is “represented by a number of arcs” as each allograph consists of a series of arcs) depicting the way of writing symbols of the best template.

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Regarding **claim 19**, *Beernink '439* discloses wherein the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) is the writing symbol pattern of the best template (top template “Correct” at item 170, fig. 6), and wherein the step of presenting comprises presenting the best writing symbol pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) of a best template (top template “Correct” at item 170, fig. 6) of the best template on the screen (fig. 6 screen).

Regarding **claim 20**, claim 2 recites identical features as in claim 20. Thus, references/arguments equivalent to those presented below for claim 2 are equally applicable to claim 20.

Regarding **claim 21**, claim 3 recites identical features as in claim 21. Thus, references/arguments equivalent to those presented below for claim 3 are equally applicable to claim 21.

Regarding **claim 22**, *Beernink '439* discloses wherein the step of presenting comprises presenting the whole best writing symbol pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) represented by the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) at once.

Regarding **claim 23**, claim 5 recites identical features as in claim 23. Thus, references/arguments equivalent to those presented below for claim 5 are equally applicable to claim 23.

Regarding **claim 24**, *Beernink '439* discloses further comprising, before the step of presenting, manipulating (manipulation occurs when transforming “C” at item 172 to the “C” at fig. 170) the best writing symbol pattern (e.g., writing symbol pattern “C” in best template “Correct” selected, not writing symbol pattern “c”, thus “C” being the best writing symbol pattern) represented by the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) according to characteristics of the handwritten pattern (e.g., fig. 6, item 172; “Correct”).

Regarding **claim 26**, *Beernink '439* discloses wherein the handwritten pattern is entered on an input area (e.g., fig. 3, item 151) on the screen (fig. 2, item 44; fig. 6, item 151) and the

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best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) is presented in a presentation area (fig. 6, item 168) on the screen (fig. 2, item 44; fig. 6, item 151), whereby said presentation area overlaps the input area (when the recognition of the handwriting updates, it is performed right over the same spot, thus overlapping).

Regarding **claim 27**, *Beernink '439* discloses wherein a step of recognizing comprises returning at least one alternative interpretation (e.g., handwritten “Correct” item 172 returns list item 170, the letter “C” in “Correct” returns templates “Correct” and “correct”).

Regarding **claim 28**, *Beernink '439* discloses presenting the at least one of the plurality of writing symbol patterns (e.g., fig. 6, item 170 is composed of "C", "c", "o", "r", "u", "w", "t", etc. in each of the templates) of the at least one alternative interpretation (e.g., handwritten “Correct” item 172 returns list item 170, the letter “C” in “Correct” returns templates “Correct” and “correct”) at a request of a user (the user requested the list item 170).

Regarding **claim 29**, *Beernink '439* discloses wherein the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) is associated with a category (a category is a character from the English alphabet, each category comprised of different user styles writing it, and whether it is uppercase, lowercase, etc) defining what kind of symbol is represented by each of the plurality of templates (fig. 6, item 170; e.g., template1 being “Correct”, template2 being “correct”, template3 being “Currect”, template4 being “Cwrect”, template5 being “currect”).

Regarding **claim 30**, *Beernink '439* discloses wherein the step of presenting comprises masking the presentation of the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) according to which category (a category is a character from the English alphabet, each category comprised of different user styles writing it, and whether it is uppercase, lowercase, etc) the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation) is associated with (the masking is performed in step 170 of fig. 6 of the best interpretation being presented being the top of the list, among other possibilities of which include "C" and "c" for the character "C").

Regarding **claim 31**, *Beernink '439* discloses wherein the category (“C” is “associated” with the capitalized letter category in fig. 6, item 170) is indicated by a certain color of a background (the background color is white that indicates “C” is capitalized) to the at least one of

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the plurality of writing symbol patterns represented by the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation).

Regarding **claim 32**, *Beernink ‘439* discloses wherein the category (“C” is “associated” with the capitalized letter category in fig. 6, item 170) is indicated by a certain color of the at least one of the plurality of writing symbol patterns (the color is black that indicates “C” is capitalized) represented by the best interpretation (fig. 6, item 168 wherein the top of the list “Correct” is the best interpretation).

Regarding **claim 33**, claim 1 recites identical features as in claim 33. Thus, references/arguments equivalent to those presented above for claim 1 are equally applicable to claim 33.

Regarding **claim 34**, claim 15 recites identical features as in claim 34. Thus, references/arguments equivalent to those presented above for claim 15 are equally applicable to claim 34.

### ***Claim Rejections - 35 U.S.C. § 103***

[10] The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

#### ***Beernink ‘439 in view of Sparr et al.***

[11] **Claim 7** is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Beernink ‘439* in view of *Sparr et al.*.

Regarding **claim 7**, while *Beernink ‘439* discloses the method of claim 6, *Beernink ‘439* does not teach wherein the step of manipulating is done in consideration of at least one characteristic in the group of translation, rotation, slant and scaling.

*Sparr et al.* teaches wherein a step of manipulating is done in consideration of at least one characteristic in the group of translation, rotation, slant and scaling (fig. 2, fig. 3).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made for the step of manipulating of *Beernink* '439 to be done in consideration of at least one characteristic in the group of translation, rotation, slant and scaling as taught by *Sparr et al.* so that "to a larger extent accept[ing] individual styles of handwritten characters and unusual fonts of typewritten characters, and is easy to implement with limited computing power.", para. 0006.

Regarding **claim 25**, claim 7 recites identical features as in claim 25. Thus, references/arguments equivalent to those presented above for claim 7 are equally applicable to claim 25.

*Beernink* '439 in view of *Kadashevich et al.*

[12] **Claim 17** is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Beernink* '439 in view of *Kadashevich et al.*

Regarding **claim 17**, while *Beernink* '439 discloses the method according to claim 16, wherein the step of presenting comprises presenting the best allograph represented by an image (fig 7, item 76) depicting the way of writing symbols of the best template, *Beernink* '439 do not disclose wherein the image is a bitmap image.

*Kadashevich et al.* discloses a character recognition system identification of scanned and real time handwritten characters that includes teaching a bitmap image (8:60-67; 9:17-22; 13:16-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the image of *Beernink* '439 to be a bitmap image as taught by *Kadashevich et al.* to provide an "array wherein each bit in the array represents a pixel of the...image, with the state of bit (0 or 1) representing whether the corresponding pixel is a background or foreground pixel and the location of the bit in the array representing the coordinates of the corresponding pixel in the image.", *Kadashevich et al.*, 8:60-67.

**Conclusion**

[13] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

[14] Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID P. RASHID whose telephone number is (571)270-1578 and fax number (571)270-2578. The examiner can normally be reached Monday - Friday 7:30 - 17:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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